

# **EXHIBIT 3**

# NEWTON's TELECOM DICTIONARY



The Official Dictionary of Telecommunications  
Networking and Internet

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Kramer 0005**

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## Snuggling / Soft Key

**Snuggling** Snuggling is a method used by operators of surveillance equipment. A surveillance equipment operator, when building radio transmitters, will select a transmitter frequency close to that of a nearby high powered transmitter, usually, a commercial radio station. Most ordinary radio gear will automatically tune into the stronger of the two signals. The operator must use a specially modified receiver capable of detecting and isolating the weaker signal. "Snuggling" will be difficult to detect by low quality RF receivers when making a countermeasure sweep.

**SO** Serving Office. Central office where IXC (InterExchange Carrier) has POP (Point Of Presence).

**Soak** A means of uncovering problems in software and hardware by running them under operating conditions while they are closely supervised by their developers.

**Soap** Simple Object Access Protocol (SOAP) is new "open" software developed by Microsoft for exchanging information over the Web based on a standard called the Extensible Markup Language (XML). SOAP will be open if it's ever adopted by a standards body or sufficient number of programmers program to it and it becomes a de facto standard. SOAP is actually a network protocol that lets software objects developed using different languages communicate with each other. Microsoft sees it as leveling the playing field between Windows and development strategies based on Java. Instead of being forced to choose one model, companies will be free to select whichever is best suited to solving the problem at hand, Microsoft argues.

At issue is the slugfest between Microsoft and its competitors over the programming models software developers use. Microsoft has its own programming model based on the Windows operating system, called the Component Object Model (COM). Its competitors support Enterprise JavaBeans (EJBs) and Common Object Request Broker Architecture (CORBA), two programming models that are tightly integrated with each other.

SOAP would replace Microsoft's current proprietary protocol called DCOM for communication over the Internet. Because SOAP is based on XML, it's compatible with all programming models and allows businesses to exchange data with each other over the Internet.

**SOC** System-On-a-Chip. A silicon integrated circuit which combines generic functions (e.g., microcontrollers, UARTs, memory, FIFOs, and other analog and digital logic functions) with custom design elements to create a device that contains all major elements of a system on one integrated chip. This is one method of increasing design productivity. The SOC designer collects and integrates pre-defined (and pre-tested) components similar to the way hardware designers collect and interconnect integrated circuits on a circuit board design. The final implementation of an SOC may be in an ASIC or FPGA. Also see ASIC and FPGA. Thanks to Ken Coffman for this definition.

**Social Computing** A term that emerged in the summer of 1993. Defined by Peter Lewis in the New York Times of September 19, 1993, social computing is a "communications-rich brew," which is "expected to create new ways for businesses and their customers to communicate, over new types of wireless as well as wired pathways, using new types of computers called personal communicators." According to Peter Lewis, "The rise of social computing is expected to shift the emphasis of computing devices away from simple number crunching and data base management to wider-ranging forms of business communications...Where client server broke away from mainframe-based systems and distributed computing power to everyone in the organization, social computing goes the next step and extends the distribution of computing power to a company's customers."

**Social Contract** An arrangement between the local telephone company and its local regulatory authority whereby the telephone company's services are detaified, but cannot be priced at less than cost. Quality of service standards apply.

**Social Engineering** Gaining privileged information about a computer system (such as a password) by skillful lying — usually via a phone call. Often done by impersonating an authorized user.

**Socket** 1. A synonym for a port.

2. A technology that serves as the endpoint when computers communicate with each other.

3. The socket in a PC which is responsible for accepting a PCMCIA Card and mapping the host's internal bus signals to the PCMCIA interface signals.

4. An operating system abstraction which provides the capability for application programs to automatically access communications protocols. Developed as part of the early work on TCP/IP.

**Socket Interface** The Sockets Interface, introduced in the early 1980s with the release of Berkeley UNIX, was the first consistent and well-defined application programming interface (API). It is used at the transport layer between Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) and the applications on a system. Since 1980,

sockets have been implemented on virtually every platform.

**Socket Number** In TCP/IP, the socket number is the joining of the sender's (receiver's) IP address and the port numbers for the service being used. These two together uniquely identifies the connection in the Internet.

**Socket Services** The software layer directly above the hardware that provides standardized interface to manipulate PCMCIA Cards, sockets and adapters. Socket Services is a BIOS level software interface that provides a method for accessing the PCMCIA slots on a computer, desktop or laptop (but most typically a laptop). Ideally, socket services software should be integrated into the notebook's BIOS, but few manufacturers have done so to date. For PCMCIA cards to operate correctly you also need Card Services, which is (are) a software management interface that allows the allocation of system resources (such as memory and interrupts) automatically once the Socket Services detects that a PC Card has been inserted. You can, however, happily operate PCMCIA cards in your laptop without using socket and card services. You simply load the correct device drivers for the cards. Such drivers always come with PCMCIA cards when you buy the cards. You will, however, have to load new drivers every time you change cards and allocate the correct memory exclusions. You will have to reboot if you disconnect your network card. Theoretical with socket and card services loaded, you do not have to reboot every time you change cards. My experience is that this works, except with network cards, which cannot be hotswapped. See PCMCIA.

**Sockets** An application program interface (API) for communications between an application program and TCP/IP. See Socket and Socket Number.

**SOCKS** A circuit-level security technology developed by David Koblas in 1990 and made publicly available by the IETF (Internet Engineering Task Force). SOCKSv5, the current version, provides security in a client/server environment, running at the Session Layer 5 of the OSI Reference Model. SOCKSv5 supports multiple means of authentication negotiated between client and server over a virtual circuit, and on a session-by-session basis. SOCKSv5 also supports the transfer of UDP data as a stream, avoiding the need to treat each packet of UDP data as an independent message. SOCKSv5 also allows packet filtering, which offers enhanced access control on a protocol-specific basis. For example, a network administrator can add a SMTP (Simple Mail Transfer Protocol) filter command to prevent hackers from extracting from a mail message information such as a mail address. Reference implementations exist for most UNIX platforms, as well as Windows NT. The cross-platform nature of SOCKS offers portability to Macintosh and other operating systems and browsers. According to Network World Magazine, September 27, 1999, "the latest version of SOCKSv5 offers network managers an easier way to run videoconferencing, video and audio streaming through firewalls, which has been difficult and time-consuming. SOCKSv5 does this by providing a single and powerful method of authenticating users, managing security policies for all Internet applications, including multimedia." SOCKS also interoperates on top of IPv4, IPsec, PPTP, L2TP and other lower-level protocols.

**SOF** Start Of File

**Soft Copy** 1. A copy of a file or program which resides on magnetic medium, such as a floppy disk, or any form that is not a hard copy — which is paper.

2. Old legacy systems term reapplied to distributed computing in which reports are read on-screen from data residing within different applications.

**Soft Decision** See SISO.

**Soft Ferrite** Ferrite that is magnetized only while exposed to a magnetic field. Used to make cores for inductors, transformers, and other electronic components. See Ba Ferrite, Ferrite and Hard Ferrite.

**Soft Font** A font, usually provided by a font vendor, that must be installed on your computer and sent to the printer before text formatted in that font can be printed. Also known as downloadable font.

**Soft Handoff** 1. A cellular radio term. A soft handoff is a handoff between cell sites involves first making the connection with the new cell site before breaking the connection with the previous cell site. A hard handoff, or "break and make" handoff, is not noticeable in a conversation, but has disastrous impact on a data communication. See also Hard Handoff. 2. A satellite term. The process of transferring a circuit from one beam or satellite to another without interruption of the call.

**Soft Input-Soft Output** See SISO.

**Soft Key** There are three types of keys on a telephone: hard, programmable and HARD keys are those which do one thing and one thing only, e.g. the touchtone buttons 1, 2, 3, \* and # etc. PROGRAMMABLE keys are those which you can program to produce a bunch of tones. Those tones might be "dial mother." They might be "transfer